West Midlands Cancer Alliance Hepatobiliary Gallbladder Polyps Management Guidelines

NHS England and NHS Improvement

West Midlands Cancer Alliance

Coversheet for Cancer Alliance Expert Advisory Group Agreed Documentation

This sheet is to accompany all documentation agreed by the West Midlands Cancer Alliance Expert Advisory Groups. This will assist the Cancer Alliance to endorse the documentation and request implementation.

EAG name	Hepatobiliary	
Document Title	*Hepatobiliary Gallbladder Polyps Management Guidelines*	
Published date	April 2020	
Document Purpose	To provide guidance on the management of Gallbladder Polyps.	
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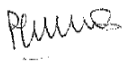
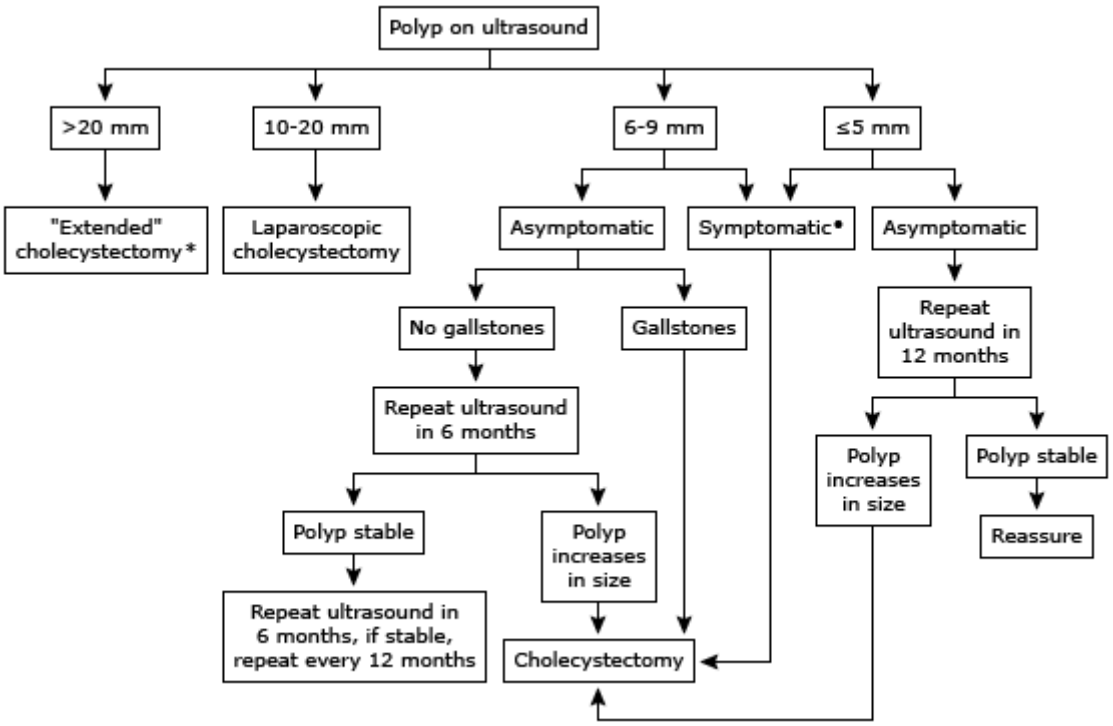
Review Date (must be within three years)	March 2023	
Approval Signatures:	**EAG Chair**  Paul Wilson Date: April 2020	**Cancer Alliance Clinical Director**  Rob Gornall Date: April 2020

1. Suggested algorithm for managing gallbladder polyp incidentally found on ultrasound**



All gallbladder polyps in patients with PSC (Primary Sclerosing Cholangitis) require laparoscopic cholecystectomy regardless of size due to increased risk of malignancy.

** Polyps greater than 1cm are to be discussed with HPB centre.

Scope of the guideline

To standardise the treatment of incidentally found gallbladder polyps in the West Midlands

2. Background

Polypoid lesions of the gallbladder (PLG) are reported increasingly as a result of the wider use of abdominal ultrasound (US) and do not represent a rare finding in general and subspecialty clinics. Estimated prevalence's of PLG vary, but they are generally considered to occur in around 5% of the population in the Western world. The majority of PLG are benign, and cholesterol polyps, adenomyomatosis and inflammatory polyps are the most common aetiologies. A small minority (5%) of PLG are 'true' adenomatous gallbladder polyps (GBP) with malignant potential. It is estimated that 3–8% of GBP are malignant and that of adenomatous polyps measuring > 10 mm, about 50% will harbor cancerous cells. In the UK, approximately 50 000 laparoscopic cholecystectomies (LCs) are performed each year, of which 800–4000 are estimated to be for GBP.

Gallbladder polyps are generally thought to be asymptomatic and indeed are commonly described as incidental findings on radiological imaging. A smaller proportion of patients may be symptomatic with typical biliary symptoms, but GBP are often associated with gallstones, which makes it difficult to establish whether they are responsible for the reported symptomatology. There is general agreement that small (<10 mm) symptomatic polyps should be removed. Gallbladder cancer (GBC) is a relatively rare neoplasm in the UK, but cumulative 5-year survival rates are only 5–10% and the removal of premalignant lesions with a relatively minor surgical operation is appealing. However, although LC is well established and is considered a 'safe' surgical procedure that can be performed in a day case context in the majority of patients, complications can still arise and the appropriateness of surgical indications is paramount when resources are limited.

The most useful predictive feature for malignancy is the size of the polyp. Polyps larger than 2 cm are almost always malignant and, in many cases, the cancer is advanced. Polyps 1 to 2 cm in size should be regarded as possibly malignant. Several pathologic studies support this, with the incidence of carcinoma being 43 to 77 percent in polyps larger than 1 cm and 100 percent in polyps larger than 2 cm. Age is another risk factor. Several studies demonstrated that age older than 50 to 60 years is associated with a higher risk for malignant polyps.

3. Treatment

Symptomatic patients — Cholecystectomy is recommended for patients who have biliary colic or pancreatitis, since an appreciable proportion of such patients with cholesterolosis or adenomyomatosis improve after cholecystectomy. On the other hand, patients with non-specific dyspeptic symptoms but without symptoms consistent with biliary colic should be managed conservatively (unless other indications for polyp removal are present) since the pathogenesis of these symptoms is unclear and cholecystectomy may not relieve the symptoms. Such patients should be treated symptomatically, as are other patients with chronic functional dyspepsia.

Asymptomatic patients — Recommendations for patients who do not fall into any of the above categories depend upon the size of the polyps.

Lesions larger than 20 mm — Lesions larger than 20 mm in diameter are usually malignant and should be resected. Because these lesions may represent advanced cancer, patients should undergo preoperative staging with a computed tomographic (CT) scan and endoscopic ultrasound. An extended cholecystectomy with lymph node dissection and partial hepatic resection in the gallbladder bed is required when performing cholecystectomy for malignancy*.

Lesions from 10 to 20 mm — Polyps 10 to 20 mm in diameter should be regarded as possibly malignant. Cancer of this size is usually at an early stage and laparoscopic cholecystectomy with full thickness dissection

(removal of the entire connective tissue layers of the gallbladder bed to expose the liver surface) is recommended.

Lesions from 6 to 9 mm — Lesions 6 to 9 mm in diameter may represent cholesterol polyps, adenomas, or carcinomas. Multiple polyps, pedunculated polyps, and those that are hyperechoic compared with the liver are usually cholesterol polyps, while solitary and sessile polyps that are isoechoic with the liver are more likely to be neoplastic.

Lesions 5 mm or smaller — Polyps ≤5 mm are usually benign and most frequently represent cholesterolosis. In a review of 203 patients with gallbladder polyps, 143 patients had polyp diameters ≤5 mm. On follow-up, these polyps were unchanged or decreased in size, and none of the 13 patients who underwent cholecystectomy had neoplastic or malignant polyps.

Patients with known PSC are at higher risk to develop gallbladder cancer and hence a cholecystectomy is recommended for polyps smaller than 10 mm. In addition, patients with gall stones and polyps ought to undergo a cholecystectomy because of the risk of cancer from gall stones.

4. Follow-up of non-resected polyps

The most reassuring finding is the stability of a polyp on repeated follow-up examinations, though there is no consensus regarding the frequency of follow-up ultrasounds.

The need for follow-up was demonstrated in a study of 1027 patients with gallbladder polyps who were followed for more than one year. An increase in polyp size was noted in 36 patients (3.5 percent), of which nine (0.8 percent) were neoplastic (defined as either malignant or premalignant). Of those nine polyps, six were less than 10 mm in size prior to the start of follow-up. A more recent study with follow-up of 346 patients found no neoplastic polyps when the polyps were smaller than 6 mm, but it found one neoplastic polyp at 7 to 9 mm and two at 10 mm or larger.

We suggest following these polyps with an ultrasound every six months for a year and then yearly only if the polyp size is stable. Surgery is indicated in patients with an increase in polyp size.

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